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## OBSERVATIONS ON THE ELONGATION OF THE STIPE OF MONTAGNITES

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Montagnites Candollei var. texensis Berk. & Curt. occurs under natural conditions in uncultivated and nonirrigated lands of the University of California Citrus Experiment Station, Riverside, California. The plants are gregarious and appear in March and April after the winter rains if environmental conditions have been favorable. Mature plants are most often found; younger stages are less often seen, probably because of the rapid elongation of the stipe which, under favorable conditions, can carry the sporebearing part in a few hours from beneath the soil to several inches above it.

Stipe elongation was observed in a young plant in the button stage (text fig. 1, a). At this stage the stipe was the same length

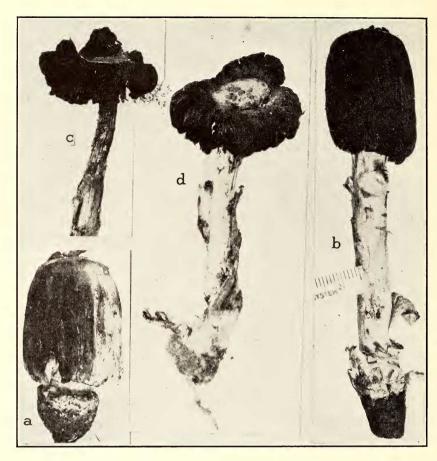


Fig. 1. Montagnites Candollei var. texensis Berk. & Curt.: a, button stage showing the enlarged base from which the volva extended (volva remains on cap); b, same plant as shown in a after several hours in a moist chamber; c and d, expanded mature plants showing a mass of spores between the caps.

as the unexpanded pileus, about two inches. After being in a moist chamber for a few hours it had elongated to four and one-half inches, or more than twice its former length; the cap was still unexpanded (text fig. 1, b). The surface of the stipe became ruptured during the process of elongation, thus giving it a scaly appearance.

Citrus Experiment Station, University of California, Riverside, September 20, 1938.